

2010



Roll No. _____

Sig. of Candidate. _____

Answer Sheet No. _____

Sig. of Invigilator. _____

BIOLOGY SSC-I

SECTION – A (Marks 12)

Time allowed: 20 Minutes

NOTE:- Section-A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 20 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

- (i) Who introduced the Binomial Nomenclature system?
 A. Vi Salius B. Carolus Linnaeus
 C. Edward Jenner D. Charles Darwin
- (ii) Which of the following statements is **TRUE** for all gymnosperms?
 A. They are vascular plants B. They have vessels in their xylem
 C. They are usually found in hot plains D. They are seedless plants
- (iii) Which of the following characteristic of Viruses is **NOT** like that of living things?
 A. Growth B. Reproduction C. Crystals D. Respiration
- (iv) The figure given below shows a nostoc filament. Where does it fix the nitrogen of the atmosphere?



- (v) Bryophytes include _____
 A. Liverworts, mosses B. Ferns, gymnosperms
 C. Gymnosperms, angiosperms D. Mosses, fungi
- (vi) Which of the following groups represents the seedless plants?
 A. Gymnosperms B. Angiosperms C. Pteridophytes D. Spermatophytes
- (vii) Which of the following phyla has metameric segmentation in the body of its animals?
 A. Mollusca B. Nematoda C. Annelida D. Arthropoda
- (viii) The term 'Cell' was first used by _____
 A. Schleiden B. Schwann C. J. Purkindi D. Robert Hook
- (ix) Which of the following plants has compound leaves?
 A. Cotton B. Mulberry C. Peepal D. Amaltas
- (x) Which of the following molecules are absorbed by the digestion of carbohydrate and protein in the small intestine?
 A. Glucose, Amino acids B. Sugar, Fatty acids
 C. Glucose, Fatty acids D. Sugar, Amino acids
- (xi) What is the function of manganese in plants?
 A. Synthesis of nucleic acids B. Synthesis of chlorophyll
 C. Building of amino acids D. Synthesis of carbohydrates
- (xii) Which of the following paths does air take to enter the human lung?
 A. Bronchiole → Bronchus → Larynx → Trachea
 B. Bronchiole → Bronchus → Trachea → Larynx
 C. Trachea → Bronchiole → Bronchus → Alveolus
 D. Trachea → Bronchus → Bronchiole → Alveolus

For Examiner's use only:

Total Marks:

12

Marks Obtained:



BIOLOGY SSC-I

Time allowed: 2:40 Hours

Total Marks Sections B and C: 53

NOTE:- Answer any eleven parts from section 'B' and any two from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

SECTION – B (Marks 33)

Q. 2 Attempt any ELEVEN parts. The answer to each part should not exceed 3 to 4 lines. (11 x 3 = 33)

- (i) Define the following:
 - a. Morphology b. Embryology c. Genetics (1+1+1)
- (ii) a. Why do some animals hibernate themselves in cold season? (2)
b. Name two vertebrates that hibernate themselves in the winter season. (1)
- (iii) Two types of blood are received by the heart of frog during circulation. (3)
 - a. Name the veins which supply blood to the heart.
 - b. Which chamber of the heart receives deoxygenated blood from all parts of the body of frog?
- (iv) Write down the salient features of the cell theory presented by Schleiden and Schwann. (3)
- (v) Name any three Angiospermic plants from which the products that are used as medicines are obtained. (3)
- (vi) Define the following:
 - a. Nucleoid b. Rachis c. Prothallus (1+1+1)
- (vii) Differentiate between Arteries and Veins. (3)
- (viii) Write down the cause of the following diseases:
 - a. Beri-beri b. Rickets c. Anaemia (1+1+1)
- (ix) Write down the structure of Amoeba. (3)
- (x) Write down one function of each of the following:
 - a. Pyrenoid b. Plasmid c. Radula of Snail (1+1+1)
- (xi) Differentiate between Aerobic and Anaerobic respiration. (3)
- (xii) Write a short note on Carbohydrates. (3)
- (xiii) Write a short note on different types of Plastids found in plants. (3)
- (xiv) a. How do the Parasitic plants obtain their food? (2)
b. Give two examples of Saprophytic plants. (1)
- (xv) Write down the structure of Xylem tissue. (3)

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks. (2 x 10 = 20)

- Q. 3** a. Describe the role of **Pancreas** and **Liver** in the digestion of food in man. (06)
b. How does digestion of food take place in the stomach of man? (04)
- Q. 4** a. Name the chemicals present in the cigarette smoke. Also describe the harmful effects of each chemical. (05)
b. What is Mutualism? Give two examples of mutualists. (03)
c. Describe Cutaneous and Buccal Respiration in frog. (02)
- Q. 5** a. Describe the internal structure of Brassica root. (05)
b. Write down the significance of meiosis cell division. (02)
c. Write down the energy rich compounds which are formed in light reaction of photosynthesis. (03)

